

# Embassy Switch

## Ambassador Electronics Bank



*In an Embassy system, multiple control center electronics (Central Electronics Banks) are connected to obtain wide area coverage or to increase audio capacity for the console. The Embassy network routes audio between radio channels, telephones, and dispatchers.*



## FEATURES

### Wide Area Communications Network Increases Efficiency and Lowers Operating Costs

- Networking several dispatch points can be accomplished by using microwave or leased telephone trunks (T1/CEPT1 lines). You can now connect several geographically separated dispatch points together. This helps make your system more efficient since you can access any remote radio channel, telephone channel, or auxiliary control from a single point. Smaller systems can be linked together to form a wide area communications system which lowers operating cost.

### Compatible/Migratable to Maximize Your Investment

- If you have an existing Motorola CENTRACOM Series II Plus dispatching console, you can reuse most of your existing electronics by upgrading to CENTRACOM Gold consoles in the field. If you own a Gold Series console (Classic Buttons and LEDs™, Classic CRT™ or CENTRACOM Elite™), you can migrate to Embassy Gold in the future.

### Unblocked Audio to All Operator Positions to Avoid Missed Calls

- Blocking occurs when the demand for audio routing is greater than the capacity of the network at a particular time. There is no blocking in the Embassy Switch\*. In an Embassy system, operators can access and listen to any assigned channel in the system.

### Fault Tolerance Maintains System Reliability

- An Embassy system provides maximum reliability because critical operations, such as diagnostics, are spread over at least two main processors. In addition, the Embassy switch allows for on-line board exchange (hot pull/insert of cards). Embassy systems can be designed to have fully redundant digital audio links to the CEB(s) and control links to the Zone Controller(s); with this design no single point of failure can result in a system failure. It is easy to maintain with field replaceable units.

### Trunking System Compatibility Provides Effortless User Roaming, Efficient Use of Channels, and Coverage Capability

- SmartZone™, SmartZone OmniLink™, and Dimetra are sophisticated trunking systems which meet the need for integrating communications systems over multiple sites. The Embassy Switch provides the audio routing in these systems. If you purchase an Embassy switch you can migrate to any of these three systems in the future.

\* SmartZone OmniLink systems may experience blocking, depending on system design.



**MOTOROLA**

# Embassy Switch

## SPECIFICATIONS

### GENERAL SPECIFICATIONS

<b>Model Number:</b>	B1842
<b>Operating Temperature Range:</b>	0° to 50°C
<b>Humidity:</b>	90% non-condensing relative humidity @ 50°C
<b>Control Type:</b>	Distributed Multi-Microprocessor
<b>Audio Switch Type:</b>	Time Division Multiplex utilizing a 32 bus system
<b>Voice Digitization:</b>	64 Kbps $\mu$ - LAW P.C.M. and A- LAW P.C.M.
<b>CEB Link:</b>	T1/CEPT1
<b>Channel Bank Link:</b>	T1/CEPT1
<b>AEB Control Architecture:</b>	Autonomous control and redundant capabilities resident on each AMB Card. Loss of one or more AMB cards will not affect remaining network resources. Redundant links and AMB cards can be designed into the CEB(s) or Zone Controller(s).
<b>AEB Data Communications:</b>	Fully redundant 2.048 MHz data communications facility. Separate signaling paths for bus control. Separate voting link for diagnostic communications.

### END TO END SPECIFICATIONS

<b>Frequency Response:</b>	300 to 3200 Hz +1, -3 dB @ less than 2% distortion (CEB to CEB).
<b>Audio Level Control:</b>	Individual 0 to -42 dB in 8 discrete 6 dB steps.

### AUDIO, CONTROL, AND DIAGNOSTIC PORT SPECIFICATIONS

<b>AMB Audio Input/Output:</b>	Two independent full duplex T1 or CEPT1 transmission standard
<b>AMB Collocated CEB Input/Output:</b>	Two independent sets of full duplex CEPT1 plus unidirectional AEB to CEB RS422 Manchester encoded link
<b>SmartZone Controller AMB Interface ZAMBI:</b>	Redundant RS422 Bidirectional AEB to SmartZone Controller Link
<b>AEB System Synchronization:</b>	Active System Timer board 25 ppm free-running oscillator. System is also capable of receiving input from high stability clock sources.
<b>CAD Interface:</b>	Dedicated AMB card, 9600 Baud, RS232
<b>Diagnostic Port:</b>	9600 Baud, RS232 Interface on all AMB Cards

### PHYSICAL SPECIFICATIONS

	Height	Width	Depth
<b>Cabinet Dimensions:</b>	2020 mm 79.2 in.	600 mm 23.6 in.	800 mm 31.5 in.
<b>Cabinet Clearances:</b>			
<b>Door swing clearance</b>	635 mm		
<b>Minimum</b>	25 in.		
<b>Recommended minimum clearance above cabinet for lights, cable trays, etc.</b>	457 mm 18 in.		
<b>Recommended door swing clearance for ventilation</b>	914 mm 36 in.		
<b>Minimum cabinet side clearance for ventilation</b>	152 mm 6 in.		

**Note:** The Ambassador Electronics Bank ships standard in a cabinet. (Not available in rack mount version.)

Specifications subject to change without notice.



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### AMBASSADOR ELECTRONICS POWER SUPPLY

<b>Efficiency:</b>	75%
<b>Input Voltage Range:</b>	93 to 132 or 187 to 264 VAC
<b>Input Frequency Range:</b>	47-63 Hz
<b>Approvals:</b>	UL, CE, FCC, CSA, IEC

### DIGITAL AUDIO LINK

	T1	CEPT1
<b>Link Bit Rate:</b>	1.544 Mbps	2.048 Mbps
<b>Line Coding:</b>	Transparent B8ZS	Transparent HDB3
<b>Framing:</b>	D4 ESF	W/CRC-4 W/O CRC-4
<b>Channel Data Rate:</b>	64 Kbps 56 Kbps	64 Kbps 56 Kbps
<b>Audio Coding:</b>	A-law $\mu$ -law	A-Law $\mu$ -law
<b>Termination:</b>	100 ohm (DS1)	120 ohm



### Support Services

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